

10/ 071,032

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NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAPLus  
NEWS 5 FEB 05 German (DE) application and patent publication number format changes  
NEWS 6 MAR 03 MEDLINE and LMEDLINE reloaded  
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 8 MAR 03 FRANCEPAT now available on STN  
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN  
NEWS 10 MAR 29 WPIFV now available on STN  
NEWS 11 MAR 29 No connect hour charges in WPIFV until May 1, 2004  
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NEWS 13 APR 26 PROMT: New display field available  
NEWS 14 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field available  
NEWS 15 APR 26 LITALERT now available on STN  
NEWS 16 APR 27 NLDB: New search and display fields available

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004

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10/ 071,032

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STRUCTURE FILE UPDATES: 7 MAY 2004 HIGHEST RN 680859-76-1  
DICTIONARY FILE UPDATES: 7 MAY 2004 HIGHEST RN 680859-76-1

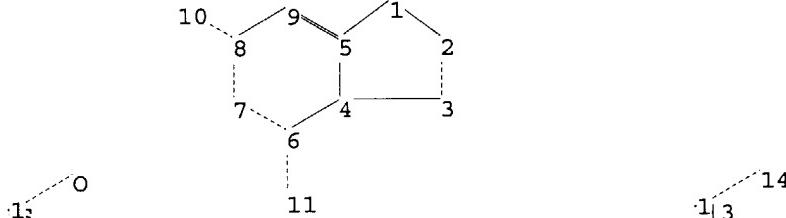
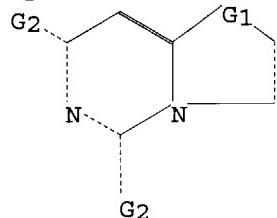
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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<http://www.cas.org/ONLINE/DBSS/registryss.html>

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chain nodes :  
10 11 13 14  
ring nodes :  
1 2 3 4 5 6 7 8 9  
chain bonds :  
6-11 8-10 13-14  
ring bonds :  
1-2 1-5 2-3 3-4 4-5 4-6 5-9 6-7 7-8 8-9  
exact/norm bonds :  
1-2 1-5 2-3 3-4 4-5 4-6 5-9 6-7 6-11 7-8 8-9 8-10 13-14  
isolated ring systems :  
containing 1 :

G1:S,SO2,[\*1]

G2:O,S

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS  
11:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE uploaded

L3 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2004:143114 CAPLUS

DOCUMENT NUMBER: 140:193098

TITLE: Matrix metalloproteinase (MMP) inhibitors, pharmaceutical compositions, therapeutic use, and methods for identification of lead compounds

INVENTOR(S): Wrigglesworth, Roger; Andrianjara, Charles; Dublancher, Anne-Claude; Bertrand, Claude

PATENT ASSIGNEE(S): Warner-Lambert Company LLC, USA

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

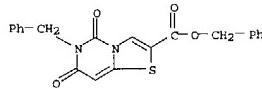
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014867	A2	20040219	WO 2002-GB3728	20020813
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TG				
RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				

L3 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



WO 2004014381 A2 20040219 WO 2003-GB3488 20030807

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU

RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: WO 2002-GB3728 A 20020813

AB The invention discloses compds. that are selective inhibitors of MMPs, pharmaceutical compns. containing the, and their use in the prevention and treatment of MMP-associated diseases (e.g. arthritis, pulmonary diseases). The invention also discloses methods for the identification of lead compds. that are selective inhibitors of MMPs. Compound preparation is described.

IT 449798-64-5

RL: PAC (Pharmacological activity); BIOL (Biological study)  
(matrix metalloproteinase inhibitors, pharmaceutical compns., therapeutic use, and methods for identification of lead compds.)

RN 449798-64-5 CAPLUS

CN 5H Thiazolo[3,2-c]pyrimidine-2-carboxylic acid, 6,7-dihydro-5,7-dioxo-6-(phenylmethyl), phenylmethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:201542 CAPLUS

DOCUMENT NUMBER: 138:217443

TITLE: Rapid identification and classification of metalloenzyme inhibitors using ligands to the functional metal cation

INVENTOR(S): Dyer, Richard Dennis; Hupe, Donald John; Johnson, Adam Richard

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1291439	A2	20030312	EP 2002-255715	20020815
EP 1291439	A3	20031119		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, SE, SK				
US 2003129672 A1 20030710 US 2002-206479 20020726				
JP 2003079394 A2 20030318 JP 2002-251608 20020829				
PRIORITY APPLN. INFO.: US 2001-315594P A 20010839				

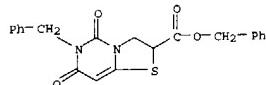
AB The present invention is a method for identifying a compound as a competitive, noncompetitive, or uncompetitive inhibitor of an enzyme having a functional metal cation. The method comprises assaying the compound for inhibition of the enzyme in the presence of a ligand to the functional metal cation. The ratio (IC50) of the inhibitor with the metalloenzyme in the presence of ligand divided by (IC50) of the compound with the metalloenzyme in the presence of ligand is less than 1 for noncompetitive or uncompetitive inhibitors; if the ratio is equal to 1, the inhibitor is noncompetitive, and if the ratio is &gt;1, the inhibitor is competitive. Thus, synergistic inhibition of matrix metalloproteinases MMP-2, MMP-9, and MMP-13 by noncompetitive inhibitor N-[3-phenylisoxazol-4-ylmethyl]aminothiocarbonylbenzamide gave IC50 ratios of 0.1, 0.39, and 0.09, resp., in the presence or absence of acetohydroxamic acid as ligand. The method provides rapid and easy identification of competitive, noncompetitive, or uncompetitive inhibitors of a metalloenzyme, and avoids laborious and time-consuming enzyme kinetics expts.

IT 449798-04-6

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(metalloproteinases inhibition by; rapid identification and classification of metalloenzyme inhibitors using ligands to the functional metal cation)

RN 449798-04-6 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-2-carboxylic acid, 2,3,6,7-tetrahydro-5,7-dioxo-6-(phenylmethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:117831 CAPLUS

DOCUMENT NUMBER: 138:170250

TITLE: Oxazolo[3,2-c]pyrimidine-5,7-dione derivatives and their analogs, active as gonadotropin-releasing hormone receptor antagonists, and their pharmaceutical compositions and methods of use

INVENTOR(S): Pontillo, Joseph; Chen, Chen

PATENT ASSIGNEE(S): Neurocrine Biosciences, Inc., USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003011870 A1 20030213			WO 2002-US24493 20020802	

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KB, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG

US 2002-211993 20020802

EP 1412363 A1 20040428 EP 2002-756891 20020802

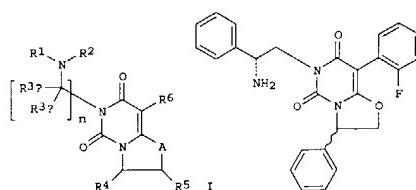
R: AT, BE, CH, DE, DK, ES, PR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

JP 2001-309980P 20010802

PRIORITY APPLN. INFO.: US 2002-US24493 W 20020802

COTHER SOURCE(S): MARPAT 138:170250

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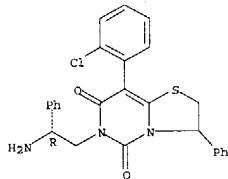
AB GnRH receptor antagonists are disclosed, which have utility in the treatment of a variety of sex-hormone related conditions in both men and women. Also disclosed are compns. containing a compound of the invention, in

L3 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 combination with a pharmaceutically acceptable carrier, as well as methods relating to the use thereof for antagonizing gonadotropin-releasing hormone in a subject in need thereof. Specifically, title compds. I are claimed [wherein: A = O, S, OC(R)R<sub>2</sub>, or NR<sub>2</sub>; n = 2, 3 or 4; R<sub>1</sub>, R<sub>2</sub> = H, (un)substituted alkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl, C(R<sub>2</sub>)<sub>n</sub>NR<sub>2</sub> or C(NR<sub>1</sub>OR<sub>1</sub>)<sub>n</sub>NR<sub>2</sub>; or NR<sub>1</sub>R<sub>2</sub> = (un)substituted heterocycle; R<sub>3a</sub> and R<sub>3b</sub> = H, alkoxy, alkylthio, alkylamino, (un)substituted alkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl, COOR<sub>12</sub> or CONR<sub>10</sub>R<sub>11</sub>; or CR<sub>3a</sub>R<sub>3b</sub> = (un)substituted homocycle or heterocycle; or R<sub>1</sub>NR<sub>3a</sub> = (un)substituted heterocycle; R<sub>4</sub> = (un)substituted aryl, arylalkyl, heteroaryl, or heteroarylalkyl; R<sub>5</sub> = H, (un)substituted alkyl, R<sub>6</sub> = (un)substituted aryl or heteroaryl; R<sub>7</sub> = H, (un)substituted alkyl; R<sub>8</sub> = H, (un)substituted alkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl; R<sub>9</sub> = H, (un)substituted alkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkyl; R<sub>10</sub>, R<sub>11</sub> = H, (un)substituted alkyl, aryl, arylalkyl, heterocyclyl, or heteroarylalkyl; and R<sub>12</sub> = H, alkyl, or substituted alkyl]. Also claimed are stereoisomers, prodrugs, and pharmaceutically acceptable salts of I. Four synthetic examples are given. For instance, N-(2-hydroxy-1-phenylethyl)-2-(2-fluorophenyl)acetamide (prepn. given) was treated with SOC<sub>12</sub> and then aq. NaHCO<sub>3</sub> and NaOH to give 2-(2-fluorobenzyl)-4-phenyl-2-oxazoline. Cyclization of this with chlorocarbonyl isocyanate gave a pyrimidinedione deriv., which underwent Mitsunobu reaction with N-Boc-D-phenylglycinol at nitrogen, followed by deprotection using TFA, to give title compd. II. In a GnRH receptor membrane binding assay, compd. I had K<sub>i</sub> of 100 μM or less (no addnl. data).

IT 496927-24-3P, 6-((2R)-2-Amino-2-phenylethyl)-8-(2-chlorophenyl)-3-phenyl-2,3-dihydrothiazolo[3,2-c]pyrimidine-5,7-dione  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (drug candidate; preparation of oxazolopyrimidinedione derivs. and analogs as gonadotropin-releasing hormone receptor antagonists)

RN 496927-24-3 CAPLUS  
 CN 5H-Thiazolo[3,2-c]pyrimidine 5,7(6H)-dione, 6-[(2R)-2-amino-2-phenylethyl]-8-(2-chlorophenyl)-2,3-dihydro-3-phenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



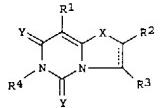
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002-637684 CAPLUS  
 DOCUMENT NUMBER: 137:185505  
 TITLE: Preparation of bicyclic pyrimidine selective MMP-13 matrix metalloproteinase inhibitors with therapeutic uses  
 INVENTOR(S): Dyer, Richard Dennis; Harter, William Glen; Hicks, James Lester; Johnson, Adam Richard; Li, Jie Jack; Roark, William Howard; Shuler, Kevon Ray  
 PATENT ASSIGNEE(S): Warner Lambert Company, USA  
 SOURCE: PCT Int. Appl., 249 pp.  
 CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064599	A1	20020822	WO 2002-IB113	20020130
W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MR, MN, MM, MX, MZ, NG, NZ, OM, PH, PL, PT, RO, SD, SE, SG, SI, SA, SL, TO, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, IS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
EP 1362054	A1	20031119	EP 2002-716244	20020130
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002007861	A	20040323	BR 2002-7861	20020130
PRIORITY APPLN. INFO.: US 2001-2687809	P	20010214		
			WO 2002-IB313	W 20020130

OTHER SOURCE(S): MARPAT 137:185505

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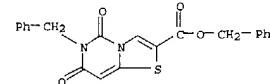
AB Selective MMP-13 inhibitors are bicyclic pyrimidines (shown as I, e.g. 6-benzyl-5,7-dioxo-6,7-dihydro-5H-thiazolo[3,2-c]pyrimidine-2-carboxylic acid benzyl ester) or a pharmaceutically acceptable salt thereof, wherein R<sub>1</sub> is H or alkyl; R<sub>2</sub>, R<sub>3</sub>, and R<sub>4</sub> include H, halo, alkyl, C(sp<sup>2</sup>)<sub>2</sub> aryl; X is O, S, SO<sub>2</sub>, CH<sub>2</sub>, C(=O), CHOH, NH, or NR<sub>5</sub>; and Y = O or S. A compound of the formula, or a pharmaceutically acceptable salt thereof, is useful for treating cancer or arthritis. IC<sub>50</sub> values for various claimed compds. show the selectivity towards MMP-13 vs. other matrix metalloproteinases and the potent MMP-13 inhibitory activity (e.g. 0.0009

L3 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L3 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 μM for 8-methyl-5,7-dioxo 6-[4-(2H-tetrazol-5-yl)benzyl]-6,7-dihydro-5H-thiazolo[3,2-c]pyrimidine-2-carboxylic acid 4-fluorobenzylamide. Although the methods of prepns. are not claimed, >100 example prepns. are included.

IT 449798-64-5P, 6-Benzyl-5,7-dioxo-6,7-dihydro-5H-thiazolo[3,2-c]pyrimidine-2-carboxylic acid benzyl ester  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (intermediate; preparation of bicyclic pyrimidine selective MMP-13 matrix metalloproteinase inhibitors with therapeutic uses)

RN 449798-64-5 CAPLUS  
 CN 5H-Thiazolo[3,2-c]pyrimidine-2-carboxylic acid, 6,7-dihydro-5,7-dioxo-6-(phenylmethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10 / 071,032

L3 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002-637472 CAPLUS

DOCUMENT NUMBER: 137:201321

TITLE: Preparation of substituted isophthalic acid derivatives, multicyclic pyrimidinediones and analogs thereof as matrix metalloproteinase inhibitors

INVENTOR(S): Adriánjara, Charles; Ortwine, Daniel Fred; Pavlovsky, Alexander Gregory; Rcaik, William Howard

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 173 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

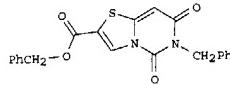
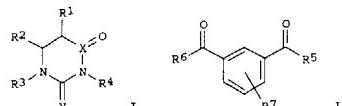
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064080	A2	20020822	WO 2002-IB447	20020213
WO 2002064080	A3	20031212		
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG			
US 2003078276	A1	20030424	US 2002-75069	20020213
EP 1361873	A2	20031119	EP 2002-710275	20020213
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE, MC, PT, IE, SI, IT, LV, FI, RO, MK, CY, AL, TR			
BR 2002007864	A	20040309	BR 2002-7864	20020213
PRIORITY APPLN. INFO.:			US 2001-268821P	P 20010214
			WO 2002-IB447	W 20020213

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L3 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



AB Title compds., I [R1 and R2 together may form a substituted aromatic ring or a heterocyclic ring; or R2 and R3 together may form substituted heterocycle; or R1, R3, or R4 = alkyl, arylalkyl, etc.; X = C, S; Y = O, N with provision when Y = N it forms a 5-membered heterocycle with R3] and II [R5 = arylalkylamine, heterocyclalkoxy, etc.; R7 = H, MeO, NO2, etc.], are prepared and disclosed as matrix metalloproteinase (MMP) inhibitors. Thus, III was prepared in five steps via cyclocondensation of diethylmalonate and benzylurea with subsequent chlorination, substitution with hydroxylsulfide hydrate to form an in situ intermediate that was reacted with bromoacetaldehyde dimethylacetal, followed by acid catalyzed cyclization and substitution with benzylchloroformate. III was demonstrated to inhibit MMP-13 with an IC50 value (in  $\mu\text{M}$ ) of 0.0230. I and II bind allosterically to the catalytic domain of MMP-13 and comprise a hydrophobic group, first and second hydrogen bond acceptors and at least one, and preferably both, of a third hydrogen bond acceptor and a second hydrophobic group. Cartesian coordinates for centroids of the above features are defined in the specification. When the ligand binds to MMP-13, the first, second and third (when present) hydrogen bond acceptors bond resp. with Thr245, Thr247 and Met 253, the first hydrophobic group locates within the S1' channel of MMP-13 and the second hydrophobic group (when present) is relatively open to solvent. The compds. specifically inhibit the matrix metalloproteinase-13 enzyme and thus are useful for treating diseases resulting from tissue breakdown, such as heart disease, multiple sclerosis, arthritis, atherosclerosis, and osteoporosis.

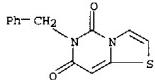
IT 449798-67-8P, 6-Benzylthiazolo[3,2-c]pyrimidine-5,7-dione

RL: RCT (Reactant); SPN (Synthetic preparation); PRBP (Preparation); RACT (Reactant or reagent)  
(intermediate; preparation and pharmaceutical activity of substituted isophthalic acid derivatives, multicyclic pyrimidinediones and analogs thereof as matrix metalloproteinase inhibitors)

RN 449798 67-8 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H) dione, 6 (phenylmethyl) - (CA INDEX NAME)

L3 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L3 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:211764 CAPLUS

DOCUMENT NUMBER: 124:261035

TITLE: Condensed imidazole compounds, their production, and use as adhesion molecule expression inhibitors.

INVENTOR(S): Takatani, Muneyo; Ikeda, Hitoshi; Iida, Kyoko; Abe, Hidenori

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 238 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

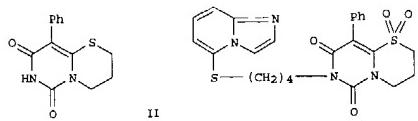
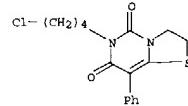
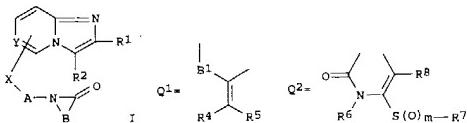
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9535296	A1	19951228	WO 1995-JP1192	19950615
W:	AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN			
RW:	KB, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2191979	AA	19951228	CA 1995-2191979	19950615
AU 9526826	A1	19960115	AU 1995-26826	19950615
EP 767790	A1	19970416	EP 1995-921968	19950615
EP 767790	B1	20011212		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			
CN 1151161	A	19970504	CN 1995-193713	19950615
CN 1046725	B	19991124		
AT 210663	B	20011215	AT 1995-921968	19950615
JP 08319288	A2	19961203	JP 1995-151844	19950619
US 5840732	A	19981124	US 1996-481391	19961206
PRIORITY APPLN. INFO.:			JP 1994-137600	A 19940620
			JP 1995-64128	A 19950324
OTHER SOURCE(S):			WO 1995-JP1192	W 19950615

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**AB** The invention provided new condensed imidazoles possessing adhesion mol. expression-inhibiting activity. This invention also provides therapeutic and prophylactic agents for diabetic nephritis and/or autoimmune disease, and immunosuppressants for organ transplantation. The compds. have formula I [wherein X = bond, S(O)m, O, NR3a, Alk, AlkW, or SA1kW; W = O, NR3a, COO or OCOR3a; Y = CH or N; B = group Q1 or Q2; B1 = (CH2)f or C2122; f = 1-6; Z1 = O or S; Z2 = O, S, Alk1, Alk1s, or NR3b; Alk, Alk1 = (un)substituted hydrocarbonyl; R1a, R3b = H, (un)substituted hydrocarbonyl; R4, R5 = H, (esterified) CO2H, (un)substituted amino or heterocyclyl, W1, SW1; W = (un)substituted hydrocarbonyl; or R4R5 may form ring; R6, R7 = (un)substituted hydrocarbonyl or heterocyclyl; R8 = H, (un)substituted hydrocarbonyl or heterocyclyl, NO2, cyano, (un)protected NH2, halo, acyl; m = 0-2]. For example, cyclocondensation of benzylurea with di-Et phenylmalonate gave B1a 3-benzyl-5-phenylpyrimidine-2,4,6(1H,3H)-trione. This was converted to the 6-chloro derivative (95%), Ni-alkylated with Br(CH2)3Cl (74%), cyclized with Na hydrosulfide (27%), and debenzylated (32%) to give pyrimidothiazinedione derivative II. This underwent alkylation with Br(CH2)4Cl (65%), S-oxidation to the dioxide (87%), coupling with 5-mercaptoimidazo[1,2-a]pyridine (44%), and acidification with HCl (100%), to give title compound III as the HCl salt. At 10 mg/kg/day i.p. in the mouse homologous skin transplantation test, III.HCl increased the mean rejection day from 13.5 (control) to 27.0.

IT 175143-18-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; preparation of condensed imidazoles as adhesion mol. expression inhibitors)

RN 175143-18-7 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 6-(4-chlorobutyl)-2,3-dihydro-8-phenyl- (9CI) (CA INDEX NAME)

ACCESSION NUMBER: 1995:319155 CAPLUS

DOCUMENT NUMBER: 122:133114

TITLE: A new class of potent hypolipemic agents raising high-density lipoproteins. Synthesis, reactions and pharmacological properties

AUTHOR(S): Furrer, H.; Granner, E.; Wagner, R.

CORPORATE SOURCE: Preclinical Res., Med. Chem., Hoechst AG Werk

Kalle-Albert, Wiesbaden, D 65174, Germany

SOURCE: European Journal of Medicinal Chemistry (1994),

29(11), 819-29

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of thiazolo[3,2-c]pyrimidine-5,7-diones has been synthesized.

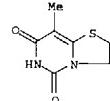
Results from in vivo evaluations in rats have shown that many of these compds. produce a pronounced increase of HDL cholesterol and a marked decrease of LDL and VLDL cholesterol. The most potent compound, at 30 mg/kg/d per os over 7 d in male rats, led to the following changes: HDL cholesterol +10%, LDL cholesterol -40%, and VLDL cholesterol -98%. These effects may result in antithrombotic properties in these compds. The preparation of 7-amino-2,3-dihydrothiazolo[3,2-c]pyrimidine-5-one and 5-amino-2,3-dihydrothiazolo[3,2-c]pyrimidin-7-ones is described.

IT 39931-58-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis of thiazolopyrimidinediones as hypolipemic agents raising high-d. lipoproteins)

RN 39931 58 3 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1993:539262 CAPLUS

DOCUMENT NUMBER: 119:119262

TITLE: Preparation and arteriosclerosis activity of thiazolopyrimidinediones and their intermediates

INVENTOR(S): Furrer, Harald; Gebert, Ulrich; Granner, Ernold

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Ger. Offen., 19 pp.

DOCUMENT TYPE: Patent

LANGUAGE: German

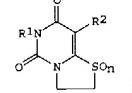
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4137437	A1	19930519	DE 1991-4137437	19911114
PRIORITY APPLN. INFO.:			DE 1991-4137437	19911114

OTHER SOURCE(S): MARPAT 119:139262

GI



AB Title compds. I [R1 = H, Cl-5 alkyl, (e-1)(C3-5)-alkenyl,

(m-1)(C1-4)-alkynyl, e-cyano (C1-5)-alkyl,

(m-1)-cyano(C2-5)-alkyl, e-methoxy-(C1-3)-alkyl,

e-ethoxy-(C1-3)-alkyl, (e-1)-oxo-(C3-4)-alkyl,

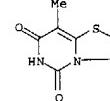
(e-1)-hydroxy-(C3-4)-alkyl, R2 = H, Cl-3 alkyl, p-chlorobenzyl; n = 0, 1], and their preparation certain intermediates, use for treating arteriosclerosis, and drugs containing them are claimed. Synthetic examples, anti-hypercholesterinemic activities, and related lipoprotein exptl. data are given.

IT 39931-58-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, in preparation of arteriosclerosis inhibitor)

RN 39931-58-3 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

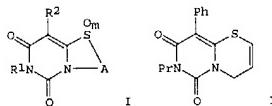


L3 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L3 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1991:228938 CAPLUS  
 DOCUMENT NUMBER: 114:228938  
 TITLE: Preparation of pyrimido[6,1-b][1,3]thiazine-6,8-diones and related compounds as drugs  
 INVENTOR(S): Naka, Takehiko; Saito, Taketoshi; Shimamoto, Norio; Suno, Masahiro  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 74 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 404525	A2	19901227	EP 1990-306691	19900619
EP 404525	A3	19911009		
EP 404525	B1	19960515		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5082838	A	19920121	US 1990-538071	19900613
AT 138069	E	19960615	AT 1990-306691	19900619
CA 2019369	AA	19901221	CA 1990-2019369	19900620
CA 2019369	C	20010724		
JP 03086487	A2	19910411	JP 1990-161446	19900621
JP 3096047	B2	20001010		

PRIORITY APPLN. INFO.: JP 1989-156725 A 19890621  
 OTHER SOURCE(S): MARPAT 114:228938  
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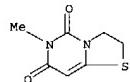


AB The title compds. I (R1 = aliphatic, aralkyl, (substituted) aryl; R2 = H, (substituted) aliphatic, aryl, amino, CHO, NO2, halo; A = (substituted) hydrocarbylene; m = 0-2) were prepared. Thus, NaSH was added to 6-chloro-1-(3-chloropropyl)-5-phenyl-3-propyluracil in DMF with ice cooling and the mixture was stirred 1 h to give 9-phenyl-7-propyl-3,4-dihydro-2H,6H-pyrimido[6,1-b][1,3]thiazine-6,8(7H)-dione. The latter was treated with (F3CCO)2O/Et3N in CH2Cl2 to give the 2-hydroxy derivative, which was refluxed with 4-MeC6H4SO3H in PhMe to give title compound II. II at 10-5M gave 90% inhibition of endothelin-induced contraction of porcine coronary artery rings.

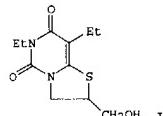
IT 133801-54-4P

RL: SPF (Synthetic preparation); PREP (Preparation)  
 (preparation of, as endothelin inhibitor, IL-1 synthesis inhibitor, and NGF synthesis stimulator)

L3 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)  
 RN 133801-54-4 CAPLUS  
 CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 2,3-dihydro-6-methyl- (9CI)  
 (CA INDEX NAME)



✓ L3 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1983:137135 CAPLUS  
 DOCUMENT NUMBER: 98:137135  
 TITLE: Structure of a novel sulfur-containing metabolite of Aclaracil (1-allyl 3,5-diethyl-6-chlorouracil)  
 AUTHOR(S): Kaul, R.; Hempel, B.; Kiefer, G.  
 CORPORATE SOURCE: Res. Lab., Pharm. Robugen G.m.b.H., Esslingen, D-7300, Fed. Rep. Ger.  
 SOURCE: Xenobiotica (1982), 12(8), 495-8  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



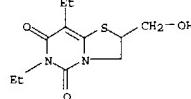
AB 6,8-diethyl-2-hydroxymethyltetrahydrothiazolo[3,2-c]pyrimidine-5,7(4H,6H)-dione (I) [79831-08-6] was identified as an Aclaracil [20938-38-9] metabolite in rabbit urine by gas liquid chromatog.-mass spectrometry. The mechanism of formation of this metabolite is discussed and metabolic path for the formation of methylthio metabolites is proposed.

IT 79831-08-6

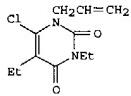
RL: BIOL (Biological study)  
 (as Aclaracil metabolite, structure of)

RN 79831-08-6 CAPLUS

CN 5H Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 6,8-diethyl-2,3-dihydro-2-(hydroxymethyl)- (9CI) (CA INDEX NAME)

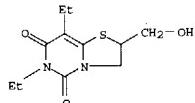


L3 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1982:155876 CAPLUS  
 DOCUMENT NUMBER: 97:155876  
 TITLE: Isolation and structures of the major sulfur-free and three minor sulfur-containing metabolites and mechanism of biotransformation  
 AUTHOR(S): Kaul, Ravinder; Hempel, Bernd; Kiefer, Gebhard  
 CORPORATE SOURCE: Res. Lab., Pharm. Robugen G.m.b.H., Esslingen, D-7300, Fed. Rep. Ger.  
 SOURCE: Journal of Pharmaceutical Sciences (1982), 71(8), 897-900  
 DOCUMENT TYPE: CODEN: JPMSAE; ISSN: 0022 3549  
 LANGUAGE: English  
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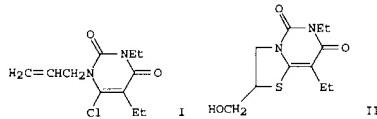


AB The metabolites of 1-allyl-3,5-diethyl-6-chlorouracil (I) [20938-38-9] in rabbit urine were isolated by preparative thick-layer, liquid-column, and gas chromatog. With the aid of mass and 1H-NMR spectra, and by comparison with an authentic sample, the major metabolite was identified as 6,8-diethyl-2-(hydroxymethyl)-1-tetrahydrooxazolo[3,2-c]pyrimidine-5,7(4H,6H)-dione [58137-53-4]; the other metabolites were identified as 1-allyl-3-ethyl-5-(1-hydroxethyl)-6-methylthiouracil [59453-66-6], 1-allyl-3,5-diethyl-6-methylthiouracil [59453-67-7], and 6,8-diethyl-2-(hydroxymethyl)tetrahydrothiazolo[3,2-c]pyrimidine-5,7(4H,6H)-dione [79831-08-6]. The mechanism of the formation of sulfur-containing metabolites is discussed, and a new metabolic pathway for the formation of methylthio compds. is proposed.

IT 79831-08-6  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and formation of, as allyldiethylchlorouracil metabolite)  
 RN 79831-08-6 CAPLUS  
 CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 6,8-diethyl-2,3-dihydro-2-(hydroxymethyl)- (9CI) (CA INDEX NAME)

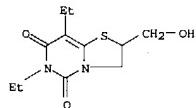


L3 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1982:1484667 CAPLUS  
 DOCUMENT NUMBER: 97:84667  
 TITLE: Identification of a third sulfur-containing metabolite of 1-allyl-3,5-diethyl-6-chlorouracil and mechanism of formation of methylthio-metabolites  
 AUTHOR(S): Kaul, R.; Kiefer, G.; Hempel, B.  
 CORPORATE SOURCE: Forschungslab., Firma Robugen G.m.b.H., Esslingen/Neckar, 7300, Fed. Rep. Ger.  
 SOURCE: Arzneimittel-Forschung (1982), 32(6), 610-12  
 DOCUMENT TYPE: CODEN: ARZNAD; ISSN: 0004 4172  
 LANGUAGE: Journal  
 German  
 GI



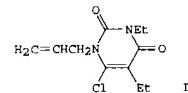
AB A new S-containing metabolite of 1-allyl-3,5-diethyl-6-chlorouracil (I) [20938-38-9] is reported. By comparison with a synthetic product, this metabolite was identified as 6,8-diethyl-2-(hydroxymethyl)tetrahydrothiazolo[3,2-c]pyrimidine-5,7(4H,6H)-dione (II) [79831-08-6]. The mechanism of formation of II and other S-containing metabolites of I in the rabbit is discussed.

IT 79831-08-6  
 RL: BIOL (Biological study)  
 (as allyldiethylchlorouracil metabolite in urine)  
 RN 79831-08-6 CAPLUS  
 CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 6,8-diethyl-2,3-dihydro-2-(hydroxymethyl)- (9CI) (CA INDEX NAME)



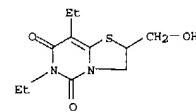
L3 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

L3 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1982:196 CAPLUS  
 DOCUMENT NUMBER: 96:196  
 TITLE: Mechanism of formation of methylthio metabolites investigated on the biotransformation of 1-allyl-3,5-diethyl-6-chlorouracil in rabbits  
 AUTHOR(S): Kaul, R.; Kiefer, G.; Hempel, B.  
 CORPORATE SOURCE: Res. Lab., Pharm. Robugen G.m.b.H., Esslingen, D-7300, Fed. Rep. Ger.  
 SOURCE: Chemosphere (1981), 10(8), 929-34  
 DOCUMENT TYPE: CODEN: CMSPAF; ISSN: 0045-6535  
 LANGUAGE: Journal  
 English  
 GI



AB A new S-containing metabolite of 1-allyl-3,5-diethyl-6-chlorouracil (I) [20938-38-9] is reported. By comparison with an authentic sample (synthesis described), this metabolite was identified as 6,8-diethyl-2-(hydroxymethyl)tetrahydrothiazolo[3,2-c]pyrimidine-5,7(4H,6H)-dione [79831-08-6]. The mechanism of formation of S-containing metabolites is discussed.

IT 79831-08-6  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and formation of, as allylichlorouracil metabolite)  
 RN 79831-08-6 CAPLUS  
 CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 6,8-diethyl-2,3-dihydro-2-(hydroxymethyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1981:121439 CAPLUS  
 DOCUMENT NUMBER: 94:121439  
 TITLE: 5-Aryl-7-(N-arylcarbamoyl)-4,6-dioxo-2,3,3a,4,5,6-hexahydrooxa(thia)zolo[2,3-c]pyrimidines and 3-(N-arylcarbamoyl)-2,4-dihydroxyquinolines from 2-methyloxazoles and aryl isocyanates  
 AUTHOR(S): Richter, R.; Ulrich, H.  
 CORPORATE SOURCE: D. S. Gilmore Res. Lab., Upjohn Co., North Haven, CT, 06473, USA  
 SOURCE: Journal of Organic Chemistry (1979), 44(26), 4877-80  
 DOCUMENT TYPE: CODEN: JOCEAH; ISSN: 0022-3263  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 94:121439

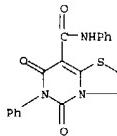
AB Two structurally different heterocyclic products, 5-aryl-7-(N-arylcarbamoyl)-4,6-dioxo-2,3,3a,4,5,6-hexahydrooxa-thiazolo[2,3-c]pyrimidines and 3-(N-arylcarbamoyl)-2,4-dihydroxyquinolines from 2-methyloxazoles and aryl isocyanates were obtained in low yield on heating 2-methyloxazoline or 2-methylthiazoline with aryl isocyanates to approx. 150°. The structures of both heterocyclic products were confirmed.

IT 7186-05-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 7186-05-0 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-8-carboxamide, 2,3,6,7-tetrahydro-5,7-dioxo-N,6-diphenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1975:140163 CAPLUS  
 DOCUMENT NUMBER: 82:140163  
 TITLE: 2,3,5,7 Tetrahydro-2,2-dimethyl-5,7-dioxo-8-hydronitrogeno-5H-thiazolo[3,2-c]pyrimidine 3-carboxylic acids, esters and alkali metal salts  
 INVENTOR(S): Nudelman, Abraham; Cynwyd, Bala; McCaulley, Ronald J.  
 PATENT ASSIGNEE(S): American Home Products Corp.  
 SOURCE: U.S., 4 pp.  
 DOCUMENT TYPE: CODEN: USXXAM  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3850933	A	19741126	US 1973-345803	19730328

PRIORITY APPLN. INFO.: US 1973-345803

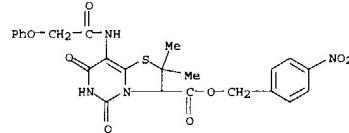
GI For diagram(s), see printed CA Issue.  
 AB Ring enlargement of penicillanates I (R1 = PhOCH<sub>2</sub>CO, PhCH<sub>2</sub>CO; R2 = CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-p, CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Me-p) with EtO<sub>2</sub>CNCO gave antitrichomonial II. Thus, refluxing I (R1 = PhOCH<sub>2</sub>CO, R2 = CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-p) with EtO<sub>2</sub>CNCO in THF gave 54% II (same R1, R2), which was refluxed in HCl-MeO to give 65% III (R1 = H, R2 = CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-p) (III). III gave 99% kill of Trichomonas vaginalis at 1000 µg/ml.

IT 54820-45-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(antitrichomonial, preparation of)

RN 54820-45-0 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-3-carboxylic acid, 2,3,6,7-tetrahydro-2,2-dimethyl-5,7-dioxo-8-(phenoxyacetyl)amino-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1973:16119 CAPLUS  
 DOCUMENT NUMBER: 78:16119  
 TITLE: Acyl and thioacyl isocyanates. XI. Reactions of benzoyl and thiobenzoyl isocyanates with 2-thiazolines and 2-oxazolines  
 AUTHOR(S): Tsuge, O.; Kanemasa, S.  
 CORPORATE SOURCE: Res. Inst. Ind. Sci., Kyushu Univ., Fukuoka, Japan  
 SOURCE: Tetrahedron (1972), 28(18), 4737-46  
 DOCUMENT TYPE: CODEN: TETRAB; ISSN: 0040-4020  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 78:16119

GI For diagram(s), see printed CA Issue.

AB PhCSNCO reacted with 2-thiazoline and 2-methyl-2-thiazoline (I) to give 6,7-dihydro-2-phenylthiazolo-[2,3,-bl-1,3,5-thiadiazin-4(8aH)-one (II) and its 8a Me derivative, resp. BzNCO reacted with I to give 2,3-dihydro 5 phenyl-8-(benzoylcarbamoyl)thiazolo[3,2-c]pyrimidin-7-one (III); PhCSNCO reacted with I and 2-methyl-2-oxazoline (IV) at 90° to give the corresponding 8-[(thiobenzoyl)carbamoyl]thiazolo- and -oxazolo[3,2-c]pyrimidin-7-ones, while reaction of BzNCO with IV gave 2-[bis(benzoylcarbamoyl)methylene]oxazolidine which, with AcOH, gave the corresponding oxazolo[3,2-c]pyrimidine. BzNCO reacted with 2 ethyl-2-thiazoline to give 2,3-dihydro-6-benzoyl-8-methylthiazolo[3,2-c]pyrimidine-5,7-dione and 2,3-dihydro-5-phenyl-8-methylthiazolo[3,2-c]pyrimidin-7 one. The reactions proceed by attack of the isocyanates on the tautomeric enamines of 2-alkyl-2-thiazoline and 2-oxazoline.

IT 39931-56-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 39931-56-1 CAPLUS

CN 5H-Thiazolo[3,2-c]pyrimidine-5,7(6H)-dione, 6-benzoyl-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

